

Hab. Nassa, Speke Gulf, S. Victoria Nyanza. Coll. F. C. Smith, Esq.

This hare seems to be a pallid form of the *L. capensis* group, approximating in its general colour to *L. tigrensis* and some of the other northern species, but differing from these latter by its shorter ears, which are of only about the same length as in *L. capensis*. The hare of Mount Kilima-njaro, of which the Museum owes a specimen to Messrs. Rowland Ward and Co., appears to be so closely allied in colour and proportions to the typical *L. capensis* that I agree with Mr. True* that it should be referred to that species.

Heuglin's *Lepus microtis* †, from the Bahr-el-Gazal, in 7° N., 30° E., is clearly founded on so young a specimen that it will probably never be satisfactorily determinable; but, whatever it may prove to be, its more rufous colouring and shorter ears appear to separate it from *L. victorie*.

XLVI.—On some of the Larger Species of *Geomys*.
By OLDFIELD THOMAS.

OWING to the impression prevailing until quite recently that the species of *Geomys* might be easily and satisfactorily determined merely by the characters presented by the grooves on their incisor teeth, their skulls have been but little attended to by authors in general, while, so far as the British Museum material is concerned, the skins examined by Mr. Alston during the preparation of the 'Biologia Centrali-Americana' have had their skulls left in them until now.

It is therefore not surprising that, on extracting a series of skulls, the specimens referred to *G. hispidus* prove to belong to two perfectly distinct species, a large and a small; and the same appears to be the case with those referred to *G. mexicanus*.

Of the *G. hispidus* group, with harsh hair, one species has roughly a skull length (basal) of almost 70 millim., while the smaller has this same dimension at most only about 56 or 58 millim. To this latter species there belong the original *G. hispidus* of Le Conte, as shown by Baird's description of the type, and also Peters's *G. heterodus*, of which Dr. Matschie has kindly sent me the typical measurements. Finally the two original specimens of Gray's "*Saccophorus quachil*" prove

* Proc. U. S. Nat. Mus. xv. p. 468 (1892).

† N. Act. Akad. Leopold. 1865, p. 32.

to be the same smaller form, although a third skin received shortly afterwards, and also referred to *S. quachil*, now appears to be a young individual of the larger.

Of this larger form the Museum possesses some excellent skins from Guatemala, collected by Mr. Salvin in 1865 and 1873, being those mentioned by Mr. Alston*, and I propose to take the best of them as the type.

Geomys grandis, sp. n.

Size very large, exceeding that of any other known species. Fur coarse, as in *G. hispidus*. Colour smoky chocolate-brown throughout, except on the muzzle, cheeks, and chin, where the hairs are white or pale whitish brown. Intermixed with the brown dorsal hairs there are, however, a certain number of pure white ones, and these seem to be most numerous in summer specimens. No darker patches round ears. Hands and feet very thinly haired, the few scattered bristles whitish. Tail absolutely naked.

Skull large and heavily built (see measurements). Ascending processes of premaxillaries surpassing the nasals by about a quarter of an inch; the space between them behind the nasals less than the breadth of one of them. Interorbital space broad, as broad as the muzzle, its edges anteriorly rounded and inflated in a manner quite unique †. Zygomata not very widely expanded in proportion to the size of the skull.

Incisors pale yellow or whitish, in marked contrast to the deep orange found in the allied species. Their single groove deep and very widely open, so that its greatest width on the cutting-edge amounts to 2 millim.; in position the bottom of the groove is internal, the breadth of the inner portion of the tooth being about 43 to 45 per cent. of the whole ‡; owing, however, to the great breadth of the groove itself, it considerably overlaps the median line, but the above percentage is

* Biol. Centr.-Amer., Mamm. p. 160.

† Most unfortunately the "blow of a machete or bush-knife," with which the Indians killed the specimens brought by Mr. Salvin, has exactly destroyed the interorbital region in all the specimens except the type; I am therefore unable to vouch for the constancy with which the peculiar supraorbital inflation is present.

‡ The position of the incisor grooves both in this and other genera may be accurately defined by measuring the distance from the bottom of the groove to the outer edges of the tooth, and then, the whole breadth of the tooth being taken as 100, the proportional breadths of the inner and outer portions may be readily calculated. The inner portion percentage of *G. mexicanus* rises to 47-50, while in *G. hispidus* it sinks to about 33.

taken strictly from the bottom of the groove. Molar teeth large.

Dimensions of the type (an adult skin, B.M. 65.5.18.65):—

Head and body 320 millim., tail 135, hind foot without claws 50*, length of longest fore claw 23.

Skull (see table below).

Hab. Dueñas, Guatemala. Coll. O. Salvin, Esq.

Of the four Dueñas specimens of *G. grandis* two, collected in 1865, are undated, but the other two are marked August and December 1873, and these two show that the species becomes much less thickly clothed in the summer, the August specimen having its belly very nearly naked, with only a sparse covering of hairs not hiding the skin. The type is intermediate in the amount of its covering between the two dated specimens.

In their tone of coloration all the specimens seen are precisely alike.

Besides the Dueñas examples there is, as already noted, a young specimen of *G. grandis* in the Museum from Coban, and the Museum also contains another from Tehuantepec, which, with some doubt, I refer provisionally to the same species.

Dr. Merriam's *G. gymnurus*† is perhaps allied to *G. grandis*, but the differences in the colour will readily distinguish the two.

Of the large soft-haired species of *Geomys* the Museum possesses unfortunately but a very small series; among them, however, is one which differs from the rest so much both in size and the characters of the incisors that, even apart from cranial characteristics, it is difficult to understand how it could have been referred to *G. mexicanus*. I would propose to call it

Geomys Merriami, sp. n.

Size large. Fur soft but short. Colour reddish fawn, quite unlike the chestnut tone of *G. mexicanus*; the hairs pale, slate-coloured basally, then with a subterminal band of fawn, their extreme tips brownish. A patch round and behind each ear dark brown. Belly and feet similar to back, but paler. Tail thinly haired, neither so absolutely naked as in *G. hispidus* and *grandis* nor so well clothed as in *G. mexicanus*; the latter species is, however, very variable in this respect.

Skull stout and heavy, with the zygomata very widely

* With claws 57.

† Proc. Biol. Soc. Wash. vii. p. 166 (1892).

expanded anteriorly, but converging very rapidly posteriorly; ascending processes of premaxillæ surpassing the nasals behind by about a quarter of an inch, the space between their posterior ends, behind the nasals, broader than they are. Interorbital region very much contracted, considerably narrower than the muzzle, its edges rounded, neither ridged nor inflated.

Anterior face of incisors orange-yellow; their single groove narrow and shallow, less developed than in any other species, its position decidedly inward of the middle line, the inner portion of the tooth being only 43 per cent. of the whole; front face of the inner portion very faintly flattened as compared to the evenly convex outer portion. Molars proportionally much smaller than in *G. grandis*.

Dimensions of the type skin (B.M. 70. 6. 20. 2):—

Head and body 295 millim., tail 95, hind foot without claws 41 *, length of longest front claw (much worn) 15.

Skull (see below).

Hab. S. Mexico. Coll. A. Boucard.

The specimen on which this species is founded is that referred to by Mr. Alston † under "Mexico (*Geale*; *Mus. Brit.*), and came from the same source and probably the same place as the type of *Oryzomys fulgens*, Thos. ‡

I have named this handsome animal in honour of Dr. C. Hart Merriam, to whose energy and scientific enthusiasm the recent enormous increase in our knowledge of North-American mammals is mainly due.

G. Merriami is readily distinguishable from *G. mexicanus*, of which Dr. Matschie has kindly sent me the original measurements, by its much larger size and by the internal position of its incisor groove. The latter character will also separate Dr. Merriam's own *G. gymnurus*, which has, like *G. mexicanus*, its "upper incisors with a single median furrow."

* With claws 47.5; the claws are, however, much worn and, as usual, but little value can be attached to the "with claw" measurement, at least as compared to the far more exact and reliable one without claws. This latter has not, I believe, been much used in America, but the majority of the Old World zoologists are gradually taking to it, and no one who has once tried it, and found its simplicity, convenience, and exactitude, would return to the loose and old-fashioned way of including the claws, which act as a second variable factor in the most important external measurement that can be given of a mammal.

† *Op. cit.* p. 159.

‡ *Ann. & Mag. Nat. Hist.* (6) xi. p. 403.

Skull-measurements of Geomys grandis, Merriami, and hispidus (all old individuals).

	<i>grandis.</i> millim.	<i>Merriami.</i> millim.	<i>hispidus.</i> millim.
Basal length	68·0	(c.) 64	57
Zygomatic breadth	43·8	47·5	39·6
Posterior breadth	44·2	43·2	(c.) 39
Nasals, length	(c.) 29	24·3	23·3
Least breadth of muzzle above maxillo-premaxillary suture	16·2	15·0	11·6
Interorbital breadth	16·0	9·3	10
Palate, length	50·7	47·8	42·2
Diastema	25·5	26	22·1
Length of upper tooth-series (crowns only)	14·5	11·2	11·7

XLVII.—*Description of a new Snake from the Gold Coast.*
By G. A. BOULENGER.

Uriechis anomala.

Rostral twice as broad as deep, visible from above; a single præfrontal, forming a very short suture with the præocular, the supraocular nearly reaching the internasal; frontal once and two thirds as long as broad, longer than its distance from the end of the snout, shorter than the parietals; one præ- and one postocular; seven upper labials, third and fourth entering the eye, fifth and sixth in contact with the parietal; four lower labials in contact with the anterior chin-shields, which are as long as the posterior. Scales in 15 rows. Ventrals 170; anal entire; subcaudals 52. Pale brown above, speckled with darker; two dorsal series of small dark brown spots; posterior half of each scale of the outer row yellowish, surrounded by crowded dark brown dots; ventrals yellowish, speckled with dark brown in the middle; subcaudals closely speckled with dark brown.

Total length 440 millim.; tail 80.

Closely allied to *U. (Metopophis) lineata*, Peters.

A single male specimen from the Gold Coast; presented to the British Museum by Mr. Linnæus Greening.